REVOX

Re:source

Analogue I/O Module

Dominating Entertainment.
Revox of Switzerland.

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Analogue I/O module

"The world is digital, our music is analogue"

Using the I/O plug-in card, the **M51** makes contact with the world of analogue audio sources. Four high-quality stereo inputs receive the signals and with very loss of signal, pass them on through gold-plated silver contact relays to the other modules. In order to meet high quality demands, the signal transfer and processing is done exclusively balanced, based on professional studio standards.

Even vinyl fans will appreciate the I/O module as it offers an excellent phono input which can handle cartridge systems from both MC and MM devices.

There is also an analogue Record output for use with recording devices such as the legendary Revox tape deck.

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I/O stands for **In/ Out**, i.e. this is a module which makes Inputs and Outputs available.

Installation

The I/O plug-in card has the most modern technology on it and should be handled with care.

Before you start to install the card, the **M51** must be switched off and the power plug must be removed from the power socket.

Any plug position can be selected for the card, with the exception of Slots 3 and 7 which are reserved for the DVD and 5.1 Decoder cards respectively.

Loosen the two screws with the TORX screwdriver supplied and remove the slot blanking plate.

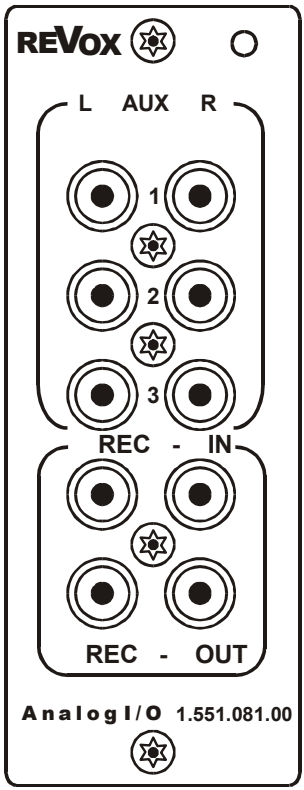
Before removing the I/O module from its packaging, make sure that you are not charged with any static electricity. This could cause a damaging power discharge when you touch the module.

To be on the safe side, you should discharge any static from yourself by touching an earthed metal object such as a radiator.

Remove the I/O module from its packaging and insert it into the slot position, using the two tracks within the **M51** to guide it into position. The lettering on the card must be at the top. Just before the card is fully inserted, you will feel a certain mechanical resistance as the card meets the **M51** contact strip. Push the card fully home by pushing in the area where the 2 screw holes are located and fix it in place with the two screws.

All further steps needed to integrate the new module into the **M51** will be carried out automatically next time the unit is switched on.

Connections



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Line input
The analogue outputs of the following devices can be connected to a line input: Tuner, CD player, MiniDisc player, Cassette deck (Play), Picture disc player, DAT player, Tape deck, audio signals from TV, Satellite receiver, Game consoles.

Line inputs

You will find the 3 AUX inputs **AUX-1**, **AUX-2**, **AUX-3** on the connection side of the I/O module.

AUX-1 can be defined as a Line or Phono input. The factory setting is Line input. This input, along with **AUX-2** and **AUX-3** can be used for the connection of devices such as a CD player, an external tuner or the audio output from a satellite receiver.

Next to these, there is **REC-IN**, a further input which can be used for recording devices such as cassette or tape decks. As the analogue music signal from a cassette desk doesn't differ from that from a CD player, other devices can also be connected to the **REC-IN** input.

Phono input

A special feature of the **M51s I/O module** is the ability to configure **AUX-1** as a phono input.

By setting DIP switches on the board, the **AUX-1** input can be configured to meet the requirements of the phono play-back system. There are three options:

AUX-1 → Line input

AUX-1 → MM Phono

AUX-1 → MC Phono

It is best to set the switches before installing the card in the **M51**. If the card is already installed, you should proceed as follows:

Important

Before starting work, switch the **M51** off and remove the power plug from the power socket.

Remove the two screws with the TORX screwdriver supplied and screw one of the Torx screws into the threaded hole on the top right of the I/O card. The I/O module releases itself from the **M51** as you do this and can then be removed.

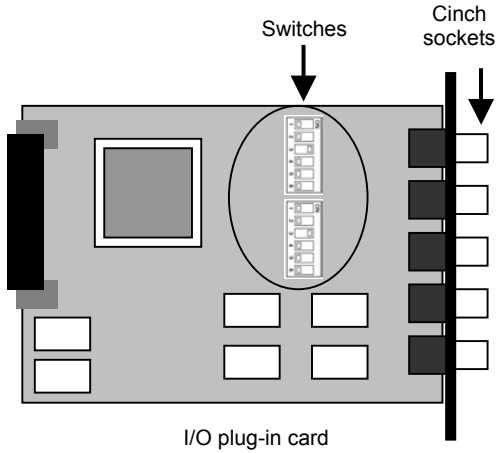
Note: Phono earth

There is a knurled screw in the accessories kit supplied with the **M51**. If you are connecting a record deck, this screw should be used to replace the lower of the two screws on the I/O module.

The turntable system can now be earthed through this knurled screw to the housing of the **M51** which ensures hum-free vinyl enjoyment.

The I/O plug-in card

This graphic shows a schematic plan of the card, highlighting the position of the two switch blocks:



I/O plug-in card

The upper and lower switch blocks define the left and the right channel of **AUX-1** respectively. For this reason, they must always have the same switch settings.

The following switch settings should be used for the different input sources.

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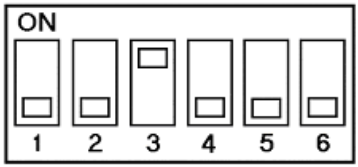
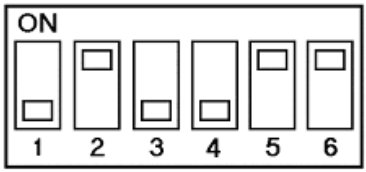
The best thing to use for positioning the switches is a stylus or a small screw driver.

AUX-1 as **Line input**



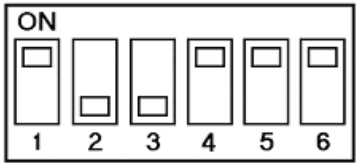
(Factory setting)
Input for CD player, external Tuner etc.

AUX-1 as **MM Phono**



Input for phonograph with MM cartridge system.

AUX-1 as **MC Phono**



Input for phonograph with MC cartridge system.

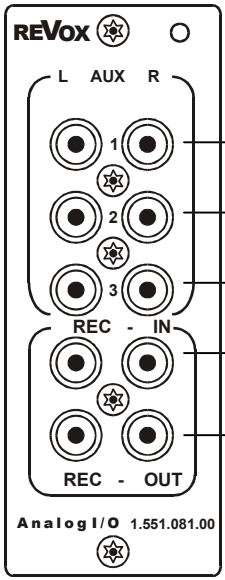
Note
As soon as the Line input **AUX-1** is configured as Phono input, this will be automatically shown in the source menu of the **M51** with the new source name **Phono**.

REC-OUT output

The **REC-OUT** output is used with recording devices such as cassette or tape decks.

The **REC-OUT** output should be connected to the input socket of the recording device.

Connection assignments



AUX-1: configurable as: Line input, MM or MC Phono

AUX-2: Line input

AUX-3: Line input

REC-IN Line input for recording devices

REC-OUT Line output for recording devices

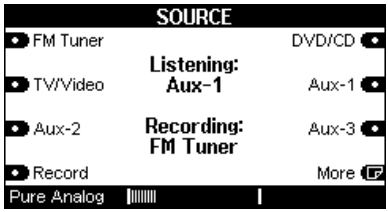
ⓘ
The five large buttons on the front of the **M51** are shown as

Setup **Source** **Amplifier** **Power** **Disc**

in the following chapters.

Select input source

The various sources are selected through the **SOURCE** menu. Press the **Source** button on the **M51** and the following menu field appears:



Now, you can select the individual **Aux** and/or **Rec-In** sources by simply pressing the softkey assigned to the required source. In the above display, **Aux-1** has been selected. This is shown in the display through the text:

Listening:
Aux-1

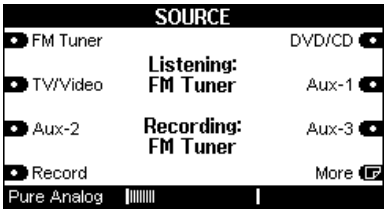
If the source you are looking for is not shown on the first **SOURCE** page, you can scroll to the next page by pressing the **More** softkey.

Select Record source

Record

If you want to make a recording to a device such as a cassette deck, you need to tell the **M51** which source should be recorded from.

Select the **SOURCE** menu as described above and then press the **Record** softkey.



Now, the music signal from the selected source, e.g. Tuner, DVD/CD, Aux2, etc., will be made available on the cinch/ RCA socket **REC-OUT**.

This is shown in the display through the text:

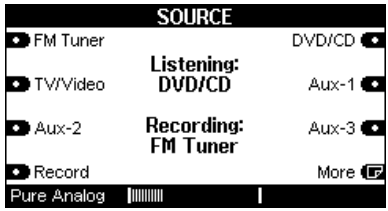
Recording:
FM Tuner

Free selection of listening source while recording

The **M51** also gives you the option to record from one source while listening to another.

In this way, you could record a radio program to cassette while watching a DVD.

To set this up, you simply have to select the listening source in the **SOURCE** menu once you have selected the recording source with **Record,** as described in the **Select recording source** section.



Example:
The above example shows a setting whereby you have chosen to watch a DVD ***(Listening: DVD/CD)*** *while at the same time recording a radio programme* ***(Recording: FM Tuner)***.

Edit source name

Edit Name

The I/O module offers you the option to select your own name for the inputs. In this way, you no longer have to remember which external device you have connected to which input. You can label it accordingly.

Select the I/O source in the **SOURCE** menu whose name you want to change. You can choose between:
Aux-1, **Aux-2**, **Aux-3**, **Rec-In**.

You call this function by pressing the **Setup** button for approx. 2 seconds and then pressing the **Source** softkey.

The following display appears:

If you press the **Edit Name** key, you will move to the source name Editor function, as described in the next section.

Edit function

Edit Name

You will move to the following menu display by pressing the **Edit Name** softkey.

The following Edit functions are available:

The softkey ← **Cursor** moves the [ ] cursor to the left.

The softkey **Cursor**→ moves the [ ] cursor to the right.

The softkey **Delete** deletes the cursor at the current [ ] cursor position.

The softkey **Insert** inserts a character to the left of the [ ] cursor.

The softkey **Store** saves the currently displayed name and returns you to the main menu.

The softkey **Cancel** returns you to the Tuner menu without saving any modifications made.

Please note

When ever you can change a setting using the rotary control knob in the next section, the area to be modified appears in the display between two square brackets **[...]**.
At the same time, the small red **Jog** light next to the knob on the **M51** lights up.

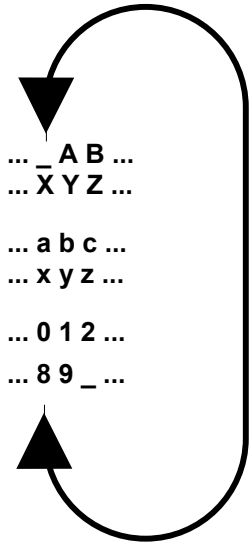
The manual highlights this additionally in the individual sections, with the following symbol:

⇨ **[ ]**

Edit characters ⇨ **[ ]**

The actual modification of the individual characters (letters and digits) is done through the rotary control knob.
When you turn the knob, upper case letters appear in alphabetical order, followed by lower case and then the digits from 0 - 9. This order can be reversed by turning the knob in the opposite direction.

Character order:

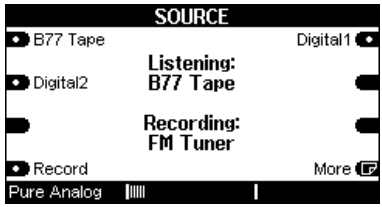


Once the required source name has been selected in this way, it can be saved with the **Store** softkey.

If you want to exit without saving, press the **Cancel** softkey.

Example

*In this example, the input **REC-IN** has been changed to **B77 Tape**.*



Restore standard names

If you want to return a modified source name to its standard factory setting, you must first select the source in question through the **SOURCE** menu.

You can chose from:
Aux-1, **Aux-2**, **Aux-3**, **Rec-In**

You call this function by pressing the **Setup** button for approx. 2 seconds and then pressing the **Source** softkey.

Now press the softkey **Edit Name** to move the editing menu.

To restore the standard name, delete the modified name completely using the **Delete** key, as shown in the following display:

When you save this with the **Store** softkey, the factory setting name is restored.

After this, you are returned to the **Setup** menu.

The standard name is restored as in the following **REC IN** example.

Individual level modification

Level Level

The I/O module offers the option found in professional studio technology, to adjust the levels of the individual analogue inputs against each other. With this function, a quieter CD player could have its level raised so that no volume adjustment is necessary when switching between sources.

If you want to edit this function, you must first select the source in question through the **SOURCE** menu.

You can choose from:
Aux-1, **Aux-2**, **Aux-3**, **Rec-In**

The **SOURCE** menu is called by pressing the **Setup** button for approx. 2 seconds and then pressing the **Source** softkey.

The following menu appears in the display with the **Level Adjust** display in the middle.

The standard setting is with the bar positioned in the middle. In this position, the signal is not modified.

If you want to lower or raise the level of this source, press the **-Level** or **Level+** softkeys accordingly. In this way, the level can be modified by ± 10 dB.

The change can be heard while you are making it as the output of this source gets quieter or louder.

If the levels are set correctly, there shouldn't be any volume difference between the adjusted analogue source and the **M51** tuner.

If this is not the case, carry out the adjustment again. Once you have achieved the required level, you can quit the **Level** function by pressing the **Source** or **Amplifier** buttons.

Technical data

Inputs:

AUX-1	Line	500 mV / 10 kOhm
Configurable as	Phono MM	5 mV / 47kOhm / 100pF
Configurable as	Phono MC	450 µV / 100 Ohm
AUX-2	Line	500 mV / 10 kOhm
AUX-3	Line	500 mV / 10 kOhm
Rec In	Line	500 mV / 10 kOhm

Output:

Record Out	2.0V / 470 Ohm *(based on Digital 0)*

Low noise specification:

AUX 1-3, Rec In	92 dBA / 0.5V
Phono MM	78 dBA / 5mV
Phono MC	75 dBA / 0.5mV

Channel separation: 80 dB

Errors excepted
Product subject to modification
Description: Version 1.00

Guarantee

The guarantee period is 24 months from the date of purchase.

Your dealer should be your first contact if you need service. If he can't give you the help you need, send your I/O module carriage free and without any accessories to your national Sales Office.

Please supply a complete description of the problem and a full return postal address.